(12) UK Patent Application (19) GB (11) 2 285 218 (13) A

(43) Date of A Publication 05.07.1995

(21) Application No 9325804.4

(22) Date of Filing 17.12.1993

(51) INT CL[6]
A61K 31/375 33/40

(52) UK CL (Edition N)
A5B BJA B180 B27X B27Y B36Y B362 B823
U1S S1313 S2410

(56) Documents Cited
US 5380764 A
Chemical Abstacts 87:195396 & Vidya, B, 20(1) pages 7-18 (1977) Chemical Abstracts 71:28113 & J. Bacteriol. 98(3) pages 949- 955 (1969)

(58) Field of Search
UK CL (Edition N) A5B BJA
INT CL[6] A61K 31/375 33/40
ONLINE DATABASE: CAS-ONLINE

(71) Applicant(s)
William Elwyn Roberts
Pant Terfyn, Rhydtalog, MOLD, Clwyd, CH7 4QS, United Kingdom

(72) Inventor(s)
William Elwyn Roberts

(74) Agent and/or Address for Service
William Elwyn Roberts
Pant Terfyn, Rhydtalog, MOLD, Clwyd, CH7 4QS, United Kingdom

(54) An aid to recovery from disease caused by bacteria fungi viruses and malignant cells

(57) A mixture for application to humans and other species internally and externally to augment one of the body's disease combating agents, which should be present in the intercellular fluid of an adequately nourished body when its defence system has been alerted, comprising dilute hydrogen peroxide (oxidant, identical to that generated naturally within body cells for oxidising food and released into their environs to eliminate attacking organisms) and ascorbic acid (antioxidant, utilised by healthy body cells to protect themselves against internal oxidation during metabolism and their outer membranes after the hydrogen peroxide release action) in proportions which produce a neutral (non-oxidising) substance that after introduction into the intercellular fluid is separated as required by healthy body cells which absorb the ascorbic acid component for their own protection whilst unleashing the hydrogen peroxide component to destroy disease causing organisms which cannot resist oxidation as successfully as healthy body cells can.

GB 2 285 218 A

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1990.

2285218

AN AID TO RECOVERY FROM DISEASE CAUSED BY BACTERIA,FUNGI, VIRUSES AND MALIGNANT CELLS

This invention relates to assisting humans, animals and birds to resist infections and recover from disease.

It has been known for many decades that humans and other species of complex multi-celled creatures have within their bodies systems for their defence against harmful bacteria, fungi, viruses and body cells which have become malignant. Invasive micro-organisms of this kind may if not checked lead a parasitic existence and multiply within and/or upon bodies, causing disease.

Body defence systems generally aim to destroy alien micro-organisms and anomalous cells without harming healthy body cells. This is attempted by several different means including, at an early stage after detection of hostile organisms, the addition of substances to the inter-cell fluid which the said organisms cannot tolerate to the degree that the healthy body cells can. Because the harmful micro-organisms have to encounter the inter-cell fluid to multiply and extend the infection, disease is normally averted at this early stage by the stated prompt action of the defence system, before it becomes necessary to put any of the body's other more elaborate remedial methods into action and without the manifestation of symptoms.

One of the substances known to be generated within the body and added to the inter-cell fluid soon after the body defence system has been alerted is hydrogen peroxide, a powerful oxidising agent. The concentration level of hydrogen peroxide in the inter-cell fluid is regulated by the body to be as high as possible without risking damage to normal healthy body cells and friendly bacteria, which are able to protect themselves, up to a limit, against oxidation by utilising natural antioxidants, an ability not possessed, or possessed to a much lesser extent by harmful bacteria and fungi, viruses and malignant cells.

The main antioxidant utilised by healthy body cells for their own protection against oxidation damage is ascorbic acid, also called vitamin C. A small but regular supply of this vitamin is essential to the body cells, of warm blooded creatures, which they use to protect their structures against oxidation damage during their normal continuous function of oxidising nutrients to generate heat.

The primates are known to differ from other species in that their bodies cannot synthesise vitamin C, meaning that all the vitamin C they need has to be ingested. In normal health this essential minimum quantity of vitamin C should be obtained from the diet, but when a human is infected by a virus for example, frequent doses of vitamin C several orders of

magnitude above the normal minimum requirement have been proved to strengthen the body's resistance to the viral infection and accelerate recovery.

Up to a limit, the more vitamin C there is available for use by the healthy body cells the higher their tolerance of hydrogen peroxide, and consequently the higher the body can safely raise the concentration of this substance in the inter-cell fluid, to maximise the damage to offensive organisms by oxidation without harming itself. A mechanism within the body appears to sense the vitamin C concentration in the inter-cell fluid and adjust the hydrogen peroxide concentration accordingly, any excess being rapidly converted into oxygen and water by special enzymes. This fact probably, at least in part, explains the observed beneficial effect of taking large doses of vitamin C when our bodies are fighting infections such as the common cold and influenza.

A case of illness may indicate either that the body defence system failed to detect disease-causing organisms, or that it was alerted but could not generate hydrogen peroxide due to some defect or shortage, or that its action had to be suspended to avoid damage to healthy body cells inadequately supplied with vitamin C to protect themselves against peroxidation. It follows therefore that there must be sufficient vitamin C in the body's inter-cell fluid before

hydrogen peroxide therapy can be applied by the body itself in the natural way or by clinical intervention.

Hydrogen peroxide, as generated within the body naturally for its defence has also been produced artificially and widely used in many fields of technology. Its germicidal properties have also been known for centuries. Solutions of hydrogen peroxide have been used to treat external wounds, gum disease etc., as well as to sterilise baby feeding bottles, wine making equipment and surgical instruments.

In 1920 hydrogen peroxide in a very diluted form was reported to have been injected into patients suffering from a life threatening viral epidemic at a hospital in France, with dramatic positive results.

In more recent times there has been experimental work done with animals and humans, confirming the significant therapeutic value of hydrogen peroxide when given in controlled doses by injection, infusion and/or by mouth. The therapy has been claimed by some to be effective against all known kinds of viruses, harmful bacteria and malignant cells.

The taking of a suitably dilute solution of hydrogen peroxide by mouth in carefully measured and regulated doses is nowadays practised by many people with considerable evidence for the curative efficacy of the treatment against a wide range of illnesses.

A disadvantage f taking hydrogen peroxide solution by mouth, which is a convenient method of self treatment, is that it reacts with stomach contents, causing nausea in most people as well as losing some of its potency before absorption into the bloodstream. Although this effect can be minimised by taking the hydrogen peroxide solution on an empty stomach and by building up to the maximum recommended dose gradually over several days or weeks, many people still suffer some nausea, and the need for the gradual build-up to maximum dose means a delay in obtaining full impact of the treatment.

A disadvantage when hydrogen peroxide is injected or infused into the blood is that the previously mentioned enzymes are triggered into action by the excessive peroxide to vitamin C ratio at and near to the application point, leading to a rapid conversion of the peroxide to prevent damage to healthy body cells as explained earlier. The result is that only a small proportion of the hydrogen peroxide administered survives to be effectively circulated through the body. This problem cannot be solved by increasing the strength of the injected or infused solution beyond the capability of the corrective enzymes as healthy body cells would then be damaged.

The present invention allows the maximum recommended dose of hydrogen peroxide in solution to be taken orally without the previously required build-up period, and without

causing significant nausea regardless of stomach contents, thus enabling the therapy to be applied swiftly with maximum effect as soon as symptoms are felt. Also,it ensures that hydrogen peroxide infused or injected into the blood is not quickly removed by enzyme action as stated, before circulating and diffusing throughout the body as required.

The principle of the present invention was conceived after realising that vitamin C and hydrogen peroxide mix naturally by chance in the inter-cell fluid of the body without any apparent adverse reaction, and predicting that adding vitamin C as ascorbic acid to a given hydrogen peroxide solution would diminish its oxidising power, reducing it to zero if sufficient was added. Such a solution of hydrogen peroxide in water neutralised by the addition of ascorbic acid was later proved to have no oxidising effect when brought into contact with materials which include body tissue, gastric juices and food. This solution may therefore be ingested without causing nausea, for efficient absorption into the body's bloodstream and delivery to the inter-cell fluid, where it is separated into its two original components by the healthy body cells which absorb the vitamin C component for their own protection against oxidation whilst releasing the hydrogen peroxide component to destroy invasive harmful organisms including viruses and malignant body cells as required.

Whereas the benefit of ingesting the minimum daily requirement of vitamin C separately during hydrogen peroxide therapy has been recognised in the past, and that hydrogen peroxide solutions have been taken orally mixed with fruit and/or vegetable juices, naturally containing small amounts of vitamin C, the novelty of the present invention is in that the oxidising power of the hydrogen peroxide solution is deliberately neutralised by the direct addition of sufficient ascorbic acid to it before introducing it to the body, minimising unwanted reactions when the mixture is taken by mouth and ensuring full potency combined with protection against oxidation damage to normal healthy body cells when applied to the body by any chosen method including injection, ingestion, infusion, the bathing of body surfaces including scalp and body orifices and/or by inhalation of the mixture as drops and/or spray into nasal cavities and lungs, all in controlled suitable doses and strengths.

According to this invention there are provided solutions of hydrogen peroxide to which at least sufficient ascorbic acid has been added to reduce the oxidising power of the mixtures to zero or near zero for application, after further dilution if deemed necessary, externally and/or internally by ingestion, infusion, injection and/or inhalation to the bodies of humans and other creatures in regulated

suitable solution strengths and doses for the purpose of preventing, or arresting and eliminating the parasitic existence of viruses and harmful bacteria and fungi and malignant cells.

Whereas the embodiment of the present invention always comprises a mixture of hydrogen peroxide and ascorbic acid in relative proportions which render the oxidising power of the said mixture at or near zero, the strength of the solution provided, here defined as the quantity of hydrogen peroxide per unit weight of solvent which is preferably water, may be varied. The mixtures as specified may be provided at strengths suitable for direct application or as stronger solutions requiring to be diluted to suit a particular person or creature to be treated and depending on the method of administration.

The amount of a chosen strength of solution, as defined above, given/taken per dose and the frequency of dosing may also be varied for optimum results in a particular case. Determination of the maximum strength of solution and dosage to be generally recommended will inevitably require cautious extensive trials, but by way of example of the embodiment of the present invention mixtures as successfully used by the inventor and a few other people over a two year test period are given. In these tests, administration of the mixture was confined to

ingestion, inhalation and application to external body surfaces and mouth.

For the treatment of common cold and influenza type symptoms a mixture comprising 2.5 millilitres of 18% strength hydrogen peroxide and 2.5 grammes of ascorbic acid in approximately 250 millilitres of water or fruit juice was taken, at most three times, spaced four hours apart, for complete elimination of the symptoms. The same strength of mixture was taken three times per day for eight weeks to alleviate severely painful body joints.

For application to external body surfaces including scalp(for the elimination of dandruff), as a mouth wash (to treat ginivitis etc.), for the elimination of common warts and fungal infections such as 'athlete's foot' and also for minor cuts and scratches the mixture used comprised 5 grammes of ascorbic acid and 5 millilitres of 18% strength hydrogen peroxide per 250 millilitres of water. This mixture was applied at least once per day or as felt necessary.

For the relief of nasal and bronchial congestion the mixture used comprised 1.25 grammes of ascorbic acid and 1.25 millilitres of 18% strength hydrogen peroxide per 250 millilitres of water.
This mixture was inhaled as a fine spray as required.

Without departing from the principle of the

present invention, other substances may be added to the specified mixtures of hydrogen peroxide neutralised with vitamin C to affect its colour and/or taste. Also, without departing from the principle of this invention dry substances and/or ozone which produce hydrogen peroxide on mixing with water may be combined with sufficient ascorbic acid to render the oxidising power of the final mixture at or near zero for medicinal use as described earlier in this specification.

Also, in the knowledge that water when irradiated with ultra-violet light and other shorter wavelength electromagnetic rays is partially converted into hydrogen peroxide, the present invention may include the provision of a container, incorporating a suitable radiation source such as an ultra-violet lamp, into which a solution of vitamin C in water is placed for irradiation at a known intensity for a prescribed period to yield a hydrogen peroxide/vitamin C mixture of required strength for medicinal use as previously described in this specification.

The mixture specified here comprising a solution of hydrogen peroxide neutralised with ascorbic acid as described above may, in addition to the methods of administration already mentioned, be introduced to the inside of the body through unbroken skin by electro-osmosis. This technique requires at least partial immersion of the body to be

treated in the specified mixture, of suitable strength, whilst a very small direct electric current is passed between the body and the said mixture in the direction that assists diffusion of the mixture into the body.

11.

AN AID TO RECOVERY FROM DISEASE CAUSED BY BACTERIA, FUNGI, VIRUSES AND MALIGNANT CELLS

CLAIMS

1.A mixture for aiding recovery from disease in humans and other species comprising a solution of hydrogen peroxide and ascorbic acid in such relative quantities or proportions that the oxidising power of the former is very much diminished or preferably cancelled completely by the latter producing a liquid which after application internally and/or externally to a body enters the fluid surrounding the cells of which that body is constituted, for separation into the two original components in a controlled manner by healthy body cells which absorb the ascorbic acid component for their own protection against oxidation damage whilst releasing the hydrogen peroxide component within their surrounding fluid to eliminate hostile organisms including bacteria, viruses, fungi, and malignant cells which are more vulnerable to oxidation damage than healthy body cells.

2.A mixture as stated in Claim 1 which when introduced to a sick body by ingestion, injection, infusion, electro-osmosis, skin or wound cotact enters that body's inter-cell fluid to augment the nearly identical mixture which the healthy adequately nourished body provides therein when that body's defence system has successfully detected invasive organisms and caused its cells to discharge some of the hydrogen peroxide which they normally generate within themselves, for use in their metabolic process, into the fluid surrounding them,

provided there is sufficient ascorbic acid present in the inter-cell fluid for the pr tection of the healthy cells' outer membranes from the oxidising action of the hydrogen peroxide whilst the said invasive organisms are killed by oxidation as they attempt to cross the inter-cell fluid to extend the infection.

3.A mixture based upon the principle stated in Claim 1 with other substances added to affect its colour and/or taste.

4.A mixture based upon the principle stated in Claim 1 to which other substances have been added as body nutrients, beneficial trace elements and/or drugs which may provide a parallel supportive action for restoring health.

5.The two components of the mixture as stated in Claim 1 packaged separately in the correct quantities and proportions for convenient combination into the specified mixture by addition to a suitable quantity of water or other preferred liquid for applying to the body internally and/or externally in a prescribed manner.

6.A prurality of the twin packages of Claim 5 for conveniently providing multiple single doses of the mixture to be prepared.

7.Apparatus for synthesising the mixture as stated in Claim 1 by exposing a quantity of water with added ascorbic acid and naturally dissolved oxygen to ultraviolet light or other electromagnetic radiation for a specified period.

8.A mixture as claimed in any of the preceeding Claims which includes a solution of hydrogen peroxide and ascorbic acid in relative quantities that provide a liquid of very low oxidising

power for application to humans and other species in suitable doses by any preferred means to enter the fluid between body cells and be separated by the said cells into the original two components gradually, the ascorbic acid component being utilised by the healthy cells to resist damaged to themselves by the oxidising action of the hydrogen peroxide component whilst invasive hostile organisms which cannot resist oxidation are being destroyed.

15

Patents Act 1977 Examiner's report to the Comptroller under Section 17 (The Search report)	Application number GB 9325804.4
Relevant Technical Fields (i) UK Cl (Ed.N) A5B (BJA) (ii) Int Cl (Ed.6) A61K 31/375, 33/40	Search Examiner J F JENKINS Date of completion of Search 28 MARCH 1995
Databases (see below) (i) UK Patent Office collections of GB, EP, WO and US patent specifications. (ii) ONLINE DATABASE: CAS-ONLINE	Documents considered relevant following a search in respect of Claims :- 1 TO 8

Categories of documents

X:	Document indicating lack of novelty or of inventive step.	P:	Document published on or after the declared priority date but before the filing date of the present application.
Y:	Document indicating lack of inventive step if combined with one or more other documents of the same category.	E:	Patent document published on or after, but with priority date earlier than, the filing date of the present application.
A:	Document indicating technological background and/or state of the art.	&:	Member of the same patent family; corresponding document.

Category	Identity of document and relevant passages	Relevant to claim(s)
A	US 5380764 (HERZOG)	
X	Chemical Abstracts 87:195396 & Vidya, B, 20(1) pages 7-18 (1977)	1
X	Chemical Abstracts 71:28113 & J Bacteriol 98(3) pages 949-955 (1969)	1

Databases:The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).